

THE NAVAL SAFETY CENTER'S AVIATION MAGAZINE

# approach

January 1998

**Pre-Sail Parties  
Before Flight Ops?**

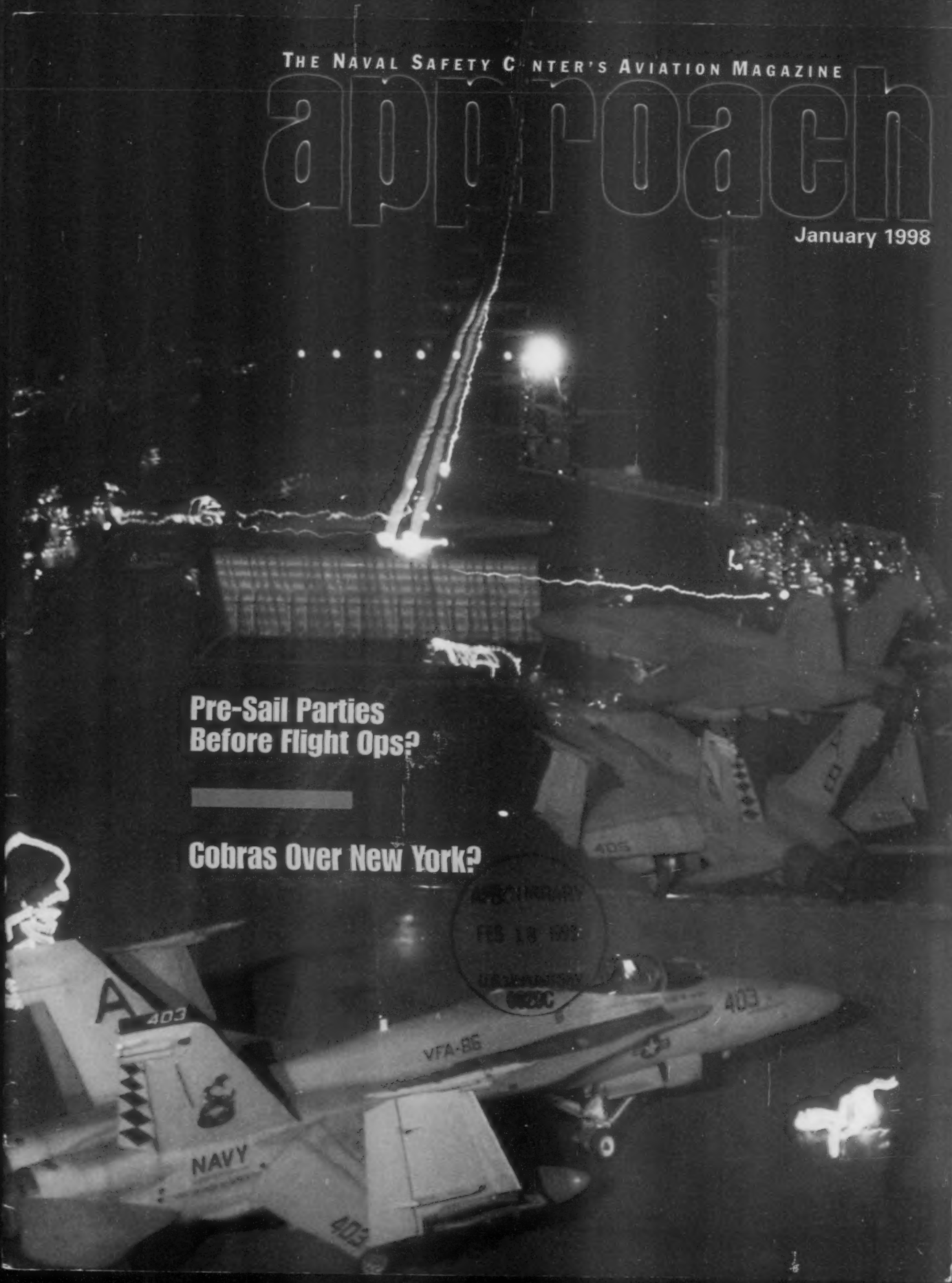
**Cobras Over New York?**

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Volume 43, Number 1

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On the cover: Night flight-deck scene on board USS George Washington (CVN 73).  
Photo by PH3 Joseph Hendricks

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# In-Port Pro

by Cdr. Terry Kraft



## Desert Port, Pierside, 2330

With their massive carrier looming over them, the ship and air-wing team gulp down their final dollar beers on the last night in port. It's been a good visit, but there seems to be a driving need for many to drink right up to the last minute.

"Okay, one more video for the boys in the air department. You guys are crazy," says the DJ as he projects another laser disc onto the big screen. A ragged cheer goes up from the masses as the pierside party rages on. The beers are still selling, and thirsty Sailors are still buying. Although liberty expires in less than an hour with a full day of flight ops to follow, those concerns seem very far away at the moment.

As liberty expires, all hands head back to the ship amidst boos and complaints. There are still plenty of things to discuss on the hangar bay; besides it's probably too hot in berthing right now.

## Flight Deck, Under Way in the Arabian Gulf, Next Day, 1830

The flight deck is finally beginning to cool below 100 degrees. It has been a grueling day with flight ops beginning at 1100. Several folks on the roof don't look so good. Dehydration has taken its toll, and flight-deck battle-dressing station has been a busy place. Somebody is throwing up behind the island. There was a crunch a few hours ago, with six more hours of flight ops ahead.

## In the Cockpit, A-6E Intruder, 1930

"Deputy, I've got a good slat on my side, IPI looks good. Double-check trim," the BN says as the Intruder approaches cat 1.

The pilot calls, "Trim set, IPI looks good, got a weight board yet?"

As the BN peers into the clearing mist ahead, he can see the weight board is not lit; the light inside is not working.

"Boss, the weight board is not lit on cat 1," he says on land-launch.

"Roger, stand by," the tower replies. A flashlight is brought over to light up the weight board.

"Forty-six thousand, I'm rogering it," replies the BN. "Min end speed is one-twenty-three."

The pilot glances over at the board to double-check. "Concur, taking tension."

As with all cat shots, there is that tense moment before the catapult fires, that time when 50 different possibilities pass through your head as you hope that tonight won't be your turn. As the aircraft accelerates down the cat, something is not right.

"Negative end speed!" the BN warns. The Intruder has barely 100 knots off the end, 20 knots below its calculated minimum end-speed.

"I got it," the pilot says matter-of-factly.

"Gear, stores!" the BN calls as the pilot raises the gear. But the stores stay on the aircraft as the pilot, with more than 3,000 A-6 hours under his belt, stirs the pot and gets the Intruder struggling away from the

# problems

dark water below. The radalt, set at 40 feet, needles its warning.

"Forty feet!" the BN calls as his fingers tighten around the ejection handle — time to check that command eject.

"Stay with it! I've got it!" the Deputy shouts as the aircraft slowly climbs into the muggy night. Things are quiet in the cockpit until 10,000 feet and climbing.

## Ready Five, 2230

"What the hell happened out there tonight? We need to get to the bottom of this," the CAG growls. "How could you guys get such a weak shot?"

As tempers cool, everyone realizes that, although no one got hurt, it is important to examine the chain of events that nearly put another Navy jet in the water. There is more to this one, it turns out, than meets the eye.

At first glance, it seems easy to spot the breakdown on the catapult. The trainee on the weight board had shown the Intruder crew the correct weight, but the catapult officer and the other people who needed to know hadn't seen it. When the shooter asked for a clarification, the trainee had already dialed in the weight setting for the Hornet behind the launching aircraft — another error. When the phone-talker looked over the weight-board guy's shoulder, he saw 38,000, which he reported. Both were unsupervised trainees, another no-no.

Several obvious training violations occurred here. There is certainly more to this near-mishap than a weight board and a couple trainees.

Perhaps part of the problem started the night before. We are all aware of the 12-hour bottle-to-flight-planning rule, but what are the rules for other aviation personnel, such as those who work on the flight deck or control aircraft on radar? How many were on the pier that night? How many were suffering on the flight deck the next day? It may be impossible to figure out how many plane captains and yellowshirts were fatigued by nightfall of the first day under way, but one thing is for sure: the Arabian Gulf is a brutal work environment.

Summer temperatures average more than 120 degrees on the flight deck. To the unprepared, it can mean dehydration or death. The cumulative effects on the body after a night of hard drinking can make even a normal day on the flight deck unbearable.

Carrier aviation on the first day out of port is a challenging activity, even more hazardous than operations later in the cruise. We frequently make the situation worse by our own lack of planning and our in-port behavior.

Cdr. Kraft is the XO of VAQ-131. At the time of this article, he was the XO of VA-95.

*The author raises an important question about guidance on alcohol consumption for deck crews similar to that for aviators. At this time, there is no such rule in the CV NATOPS or any other manuals available to Sailors. The CV NATOPS manager will be developing a manual that will eventually be included in the predeployment syllabus. — Ed*

PH2 Andrew Neerbach

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PH2 Andrew Neerdaels



by Maj. Glenn A. Murray

**N**EW YORK was brightly lit, and the famous skyline stood out in sharp contrast to the moonless sky and dark water south of Long Island. Our squadron was conducting training in urban environments (TRUE) before deploying. I was the copilot in the lead Cobra.

Our primary mission was to evacuate non-combatants from an island in the Hudson River, just outside West Point. We had two AH-1Ts, two UH-1Ns, and two CH-46Es. Our secondary mission was to familiarize ourselves with flying under low-light conditions (less than .0022 lux) around urban areas.

We had been authorized to fly under bridges along the Hudson and East Rivers to enhance the training. We had flown familiar flights during the day, and all our crews

had flown at night in the area. Before takeoff, the CO briefed the Cobra section leader about construction on several of the bridges over the East River. As the front-seat pilot in the lead Cobra, I would be the navigator, and I marked the location of these bridges on my maps.

The primary mission went fine even though the crew of one of the Hueys remarked they nearly hit a tower on a building housing the evacuees. They reported that the tower seemed darker than on previous nights. We were flying overhead cover to suppress simulated ground fire. From our perspective, it was indeed a dark night, but not abnormal for the conditions.

As the Hueys evacuated the last people, the flight broke up into sections and headed



# Work

## We had been authorized to fly under bridges along the Hudson and East Rivers...

for our secondary mission. We went south along the Hudson, then turned north, toward the East River.

Approaching the southern end of the East River, I noticed that the first bridge had construction on it. I rechecked the map, and we then flew over the bridges that did have construction and under the bridges without construction.

After we passed the last briefed obstacles, I told the PIC behind me that we were coming to the last bridge on the East River and verified it would be OK to fly under it. We maintained 70 knots and 50 feet as we started under the bridge. I looked at my map and, after looking back up, the lights on the bridge activated the automatic brightness control on my NVGs, which shut them down momentarily.

I looked away toward the water to regain the use of my NVGs and then realized we were heading directly for wires hanging below the bridge. The wires were spaced 30 to 50 feet apart and seemed to have a block at the bottom of each of them. There was no room or time to climb so I pushed down on the collective, and at the same time, I yelled, "Wires!" over the ICS.

The PIC saw them, too, and pushed the nose over. As we descended toward the river, the radar altimeter's low-altitude warning came on. It was set for 20 feet. The PIC pulled power to prevent us from hitting the water as I watched the wires pass over the main rotor, missing it by a few feet. Our wingman also avoided the same bridge, and we joined up in cruise and headed home.

We were eating midrats when another Cobra pilot told us we had been on the 11 o'clock news. We knew he was joking and ignored him. Several minutes later, however, we learned of a live interview on the bridge in question at the time we flew underneath it. A local news station was interviewing members of Greenpeace about their recent protest demonstrations. During the day, these people had sat on blocks of wood they hung beneath the bridge to throw things at a garbage barge that had been refused a pier.

The story made an interesting ready-room topic, and we learned a lesson about the capabilities and limitations of NVGs, especially under low-light conditions. Crew coordination becomes even more important, especially in the already task-saturated AH-1 cockpit. Back-seat and front-seat duties should be standardized and well-briefed.

Maj. Murray flies with MAG-42.



# Inexperience

by Lt. Shawn C. Cash

**S**HORTLY AFTER I ARRIVED at my first fleet squadron, two of our Hawkeyes were to fly from NAS Norfolk to NAS Cecil Field to support a missile off the coast of Florida. The day began with a 0600 brief and a 0730 launch for a routine 2-hour flight. There was a large storm brewing over North and South Carolina that we were able to go around.

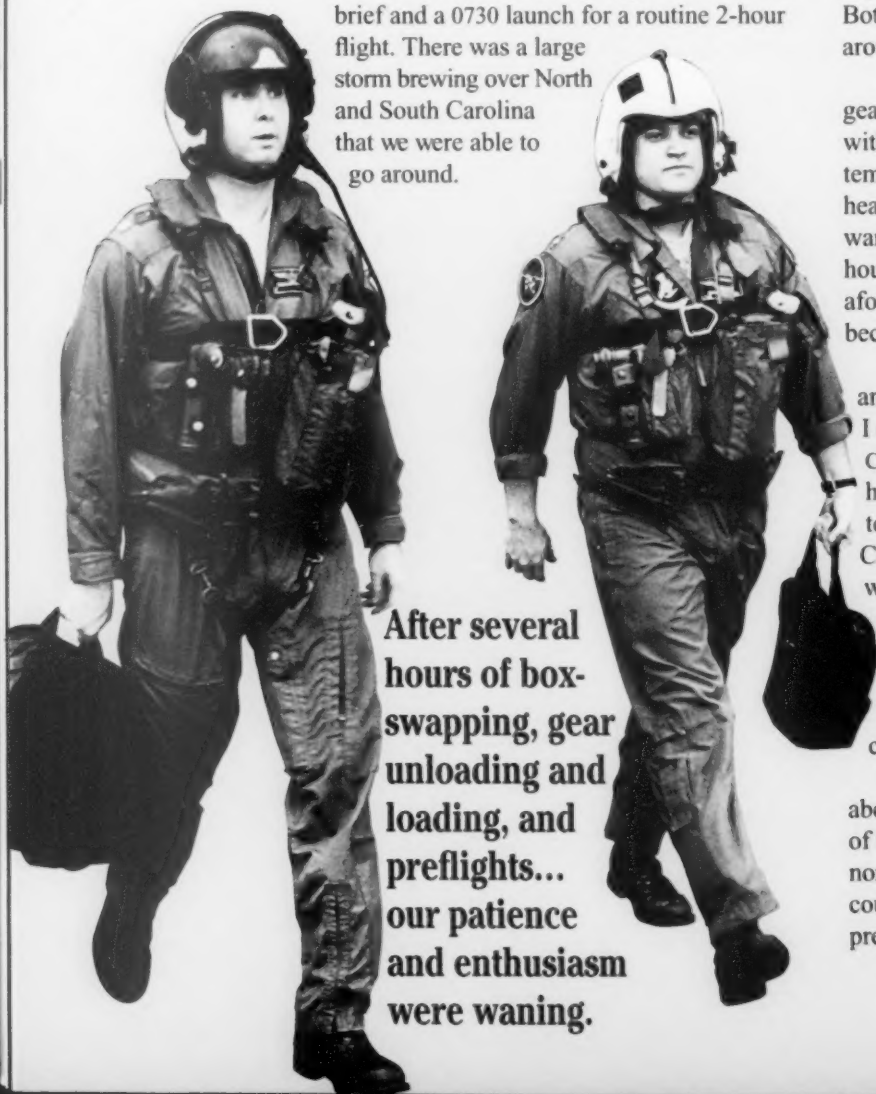
After several hours of box-swapping, gear unloading and loading, and preflights... our patience and enthusiasm were waning.

We landed, briefed again and manned up for the missile shoot, and proceeded to have both aircraft's radars go down, effectively canceling the exercise. Fortunately, the next day had been designated as a back-up day. Both crews re-filed, briefed, and manned up around 1400 for the flight back to Norfolk.

After several hours of box-swapping, gear unloading and loading, and preflights with the August sun cooking the asphalt to temperatures of 100 degrees (that's wet heat), our patience and enthusiasm were waning. Nevertheless, we logged two more hours back home, half of it IFR, through the aforementioned storm that was quickly becoming a real humdinger.

We landed, expecting to stay the night and give it another shot in the morning. As I exited the main entrance hatch behind the CAPC, I heard the plane captain ask, "Sir, how soon will you be taking off? We were told to gas the bird and shoot you back to Cecil." It was now about 1800 as we wearily went back to the ready room to prepare. Mercifully, the maintainers noted several discrepancies, which would delay the launch long enough for us to get something to eat. The other crew launched back to Cecil.

Our crew was at the O Club grumbling about our fate. As the most junior member of the crew, and not wanting to look like a non-hacker, I held my tongue for as long as I could while everyone complained about our predicament. The CAPC was probably the





# Saves the Day


most sensible and respected aviator in our squadron, and the CICO was the senior lieutenant. Yet, I was amazed that no one to this point had even mentioned throwing in the towel. I felt guilty that the thought had even crossed my mind.

Finally, it was too much, and I had to speak my mind. I told them I knew that we were in the fleet and that crew day was a concept, not a practice. However, we were about to start our fourth man-up of the day, launch into a serious storm, at night, 15 hours after our first brief of the day, just to be the back-up bird for a training mission.

"How will the mishap report read?" I asked. I guess giving all the factors in one sentence made lights come on. Instantly, the group decided that we would call it a night and start fresh the next morning, which we did.

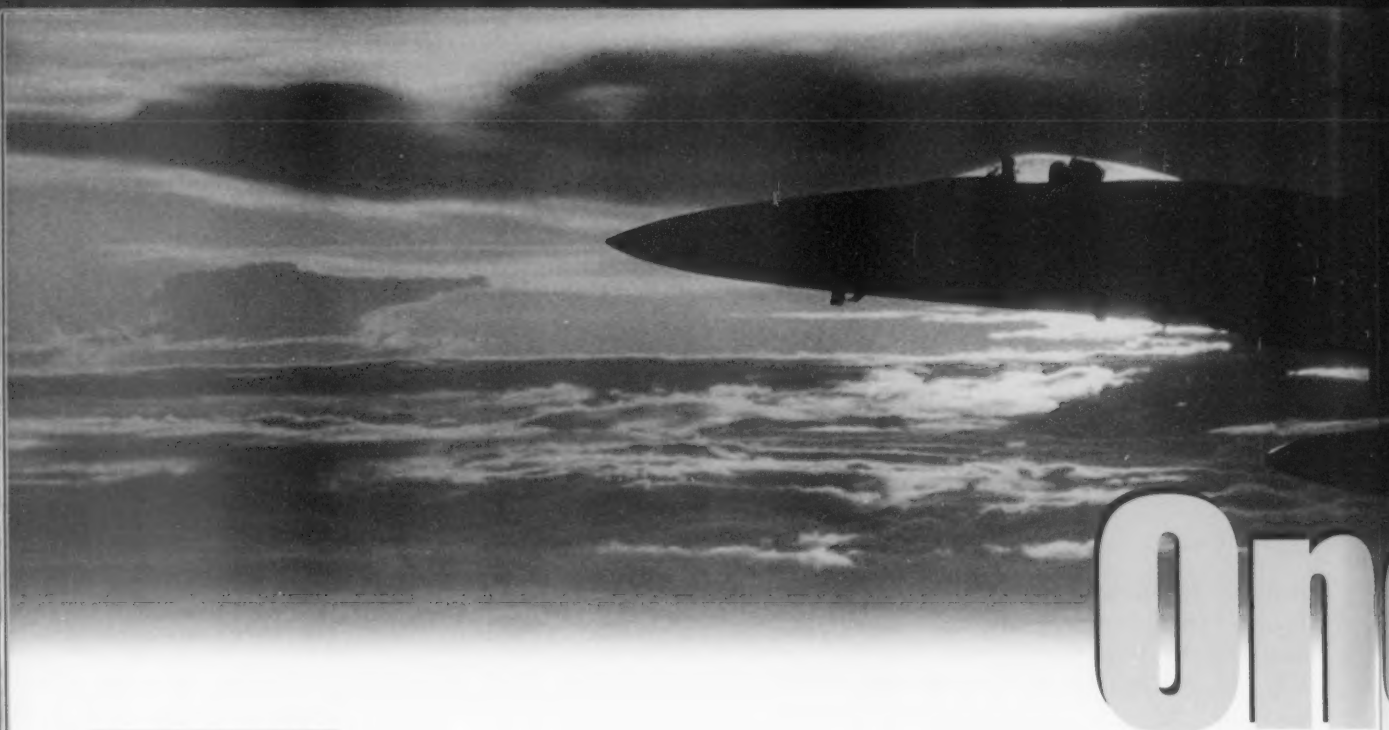
Aviators are over-achievers by nature, not accustomed to failure. They constantly

push their own envelopes of stamina, determination, and personal comfort level to accomplish the mission. But somewhere, there is a physical limit, past which, danger lurks. The seasoned aviator, as he again exceeds an old limit by only a wee bit, will be the least likely to raise the red flag, even if things move into the danger zone.

The wide-eyed novice, with his pucker-indicator pegged, but his blind faith in his mentor unshaken, must overcome his reluctance to voice his opinion at the risk of appearing meek, because at that very moment he may be in the very best position to save the crew from a grave error. His internal survival alarms have not been dulled by experience. And his timid questioning of a procedure or decision may be all it takes for the old man to adopt a more conservative course of action that may avert disaster. 

Lt. Cash flies with VAW-117.





by Lt. Matthew S. Jutte

**Y**OU ARE RTB FROM the work area with your wingman, and you are both 1,000 pounds above your ladder or bingo. The comm sounds something like this:

"Take spread and let's do an abeam, fifteen thousand, three-fifty, one point five, best jet."

"Speed and angels on the left."

"Speed and angels on the right."

"Tape's on, fight's on."

You turn in and take a lock to test your switchology. Yes, the radar locks alright out of boresight. You could take a shot right now but don't because it is a violation of training rules. Fantastic. The radar holds the lock, and the range counts down to 0.2 nm. You set the pass and call for a "right to right."

"Roger, right to right," your playmate responds.

It's been a while since you've done an actual 1 v 1, and you don't want to scare yourself or the other person. You know the training rules say the pass is to be no closer than 500 feet. You make it a little wider to err on the conservative side

There he is. You can see him in the cockpit, and you are going to watch him for a second to see which way he goes. You want to go 2-circle because you think you can force him to lose sight and perhaps get in unobserved. Or maybe you are really feeling your oats, and you know you can sustain a 7.5-G turn all day long, and the best he can do is match it.

He's going vertical. He has his nose committed, so you start your 2-circle game plan. You can still see him through about 90 degrees of turn, even though he is going into the sun and getting pretty hard to see. After

**But whoops!  
You've lost him.  
You just saw him.  
You know  
where he was a second ago.**

One

Blif

# e's

180 degrees of turn you start to take it up to where he should be. But whoops! You've lost him. You just saw him. You know where he was a second ago. You saw his aspect and you can project where he is going to be. You have seen it a hundred times.


After a few seconds, you still don't have him but you are confident you will find him again in a few seconds. Look harder. Maybe he went low. He's probably below you. Roll over on your back and see if he's there. Rats! Where is he? Be patient, you'll find him. He is probably still high. You don't see him.

"One's blind," you reluctantly report.

Well, that is the call, but a little late. What took you so long? Your wingman was blind from the merge and continued to fight even though he had been blind most of the engagement.

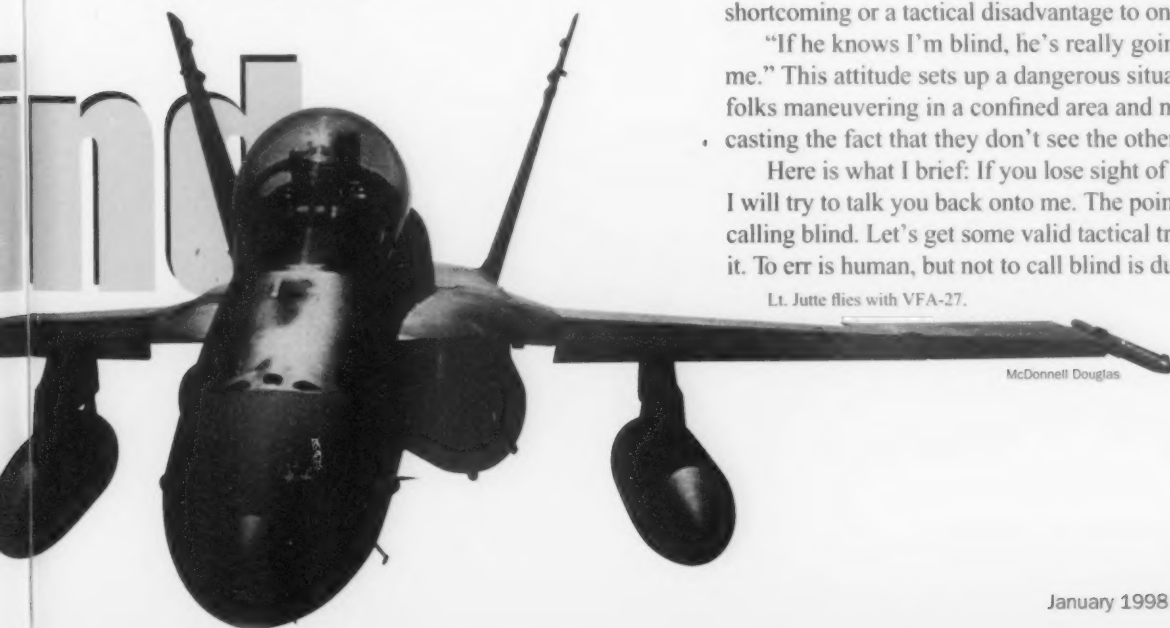
As an adversary guy for a little while, I saw this same scenario about once a month. And not just with nuggets. Two people would be in a 1 v 1; one would go blind but would hesitate to say so. Part of the reason may be the pilots' confidence that they will spot their quarry in just a second. Part of the reason may be not wanting to reveal a shortcoming or a tactical disadvantage to one's opponent.

"If he knows I'm blind, he's really going to spank me." This attitude sets up a dangerous situation: two folks maneuvering in a confined area and neither broadcasting the fact that they don't see the other.

Here is what I brief: If you lose sight of me, call it. I will try to talk you back onto me. The point is made by calling blind. Let's get some valid tactical training out of it. To err is human, but not to call blind is dumb. 

Lt. Jutte flies with VFA-27.

McDonnell Douglas



# Gary, Indiana,

by Maj. Peyton DeHart

**D**ETERIORATING WEATHER and the end of our crewday made us stop short of our destination. A brand-new-to-the-Cobra lieutenant and I were en route to Wisconsin for a static-display frag and had gotten as far as the middle of Illinois. Weather the next day in Wisconsin was supposed to be clear and beautiful; the only problem was how to get there. Our part of Illinois had a 500-foot foggy ceiling and two miles visibility.

I had enough gas to make the next planned fuel stop, but not enough for IFR reserves. I briefed that we would fuel our way, low and slow to the destination. To begin our aerial tour of middle-America farmland, I called for a special-VFR departure. The guy in the tower didn't get many helicopters at his field. He repeated the weather as if I hadn't heard it correctly.

I said, "Well then, I'll take extra-special VFR." He gave us clearance, and we whopped off into the mist.

Ever mindful of the fuel, especially when the weather caused us to slow down (so as not to run into towers), I calculated that we would have 400 pounds remaining when we got to the gas stop at Midway Airport in Chicago. The 500-foot overcast changed from light gray, to dark gray. Wisconsin still reported clear.

A mid-course, fuel-burn calculation left me with the distinct impression that I would land with 300 pounds of fuel at Midway, the absolute minimum legal amount. Another reading some time later told me 250 pounds. Well, I could stretch it.

The next look, 200 pounds. I had to think of something else – quick!

Gary Regional, with contract fuel, was a few miles closer than Midway. Not much, but better than nothing.

"Come 15 degrees right," I told the lieutenant.

Time ran on, the mileage got shorter, the fuel gauge wound down. But the numbers were encouraging. We'd land with just enough fuel, not a pound more.

"Where are we going?" asked my copilot.

"Gary, Indiana," I replied.

"I'm sure I've heard of that place before. What's it known for?"

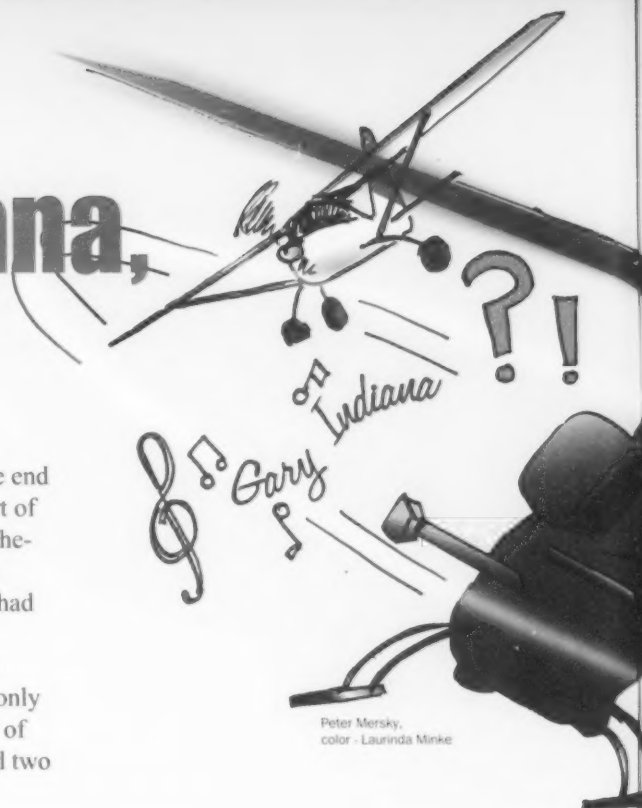
"Ron Howard, who played Opie, sings about it to Shirley Jones, who was the mom in the 'Partridge Family,' in the musical called 'The Music Man.'"

"Huh?"

"Home of the Jackson Five?"

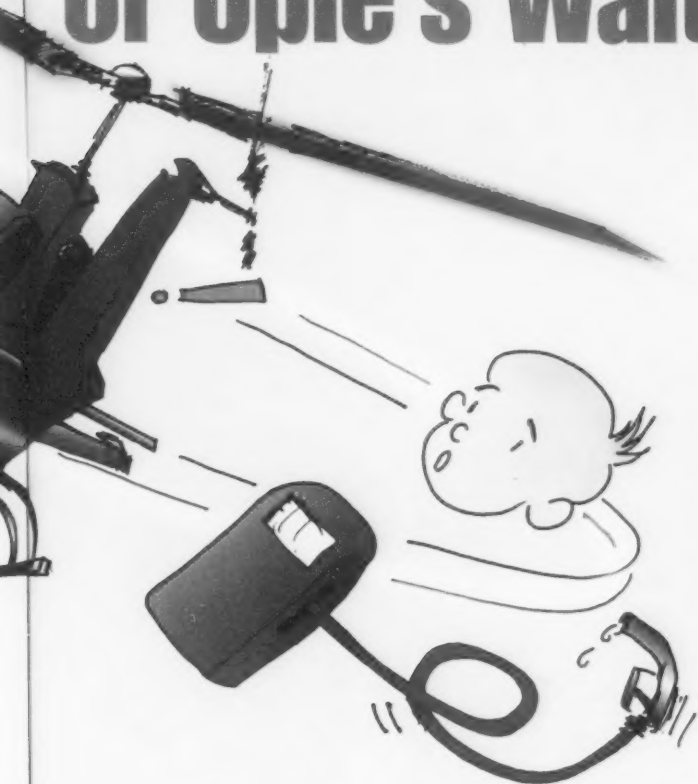
"Huh?"

"Michael Jackson?" I asked in growing frustration. "Forget it. Either I'm too old or





# or Opie's Waiting For Us!



There was no traffic; however, the weather was miserable.


you're too young. It's known for having contract fuel that I can get to before flaming out."

"Oh."

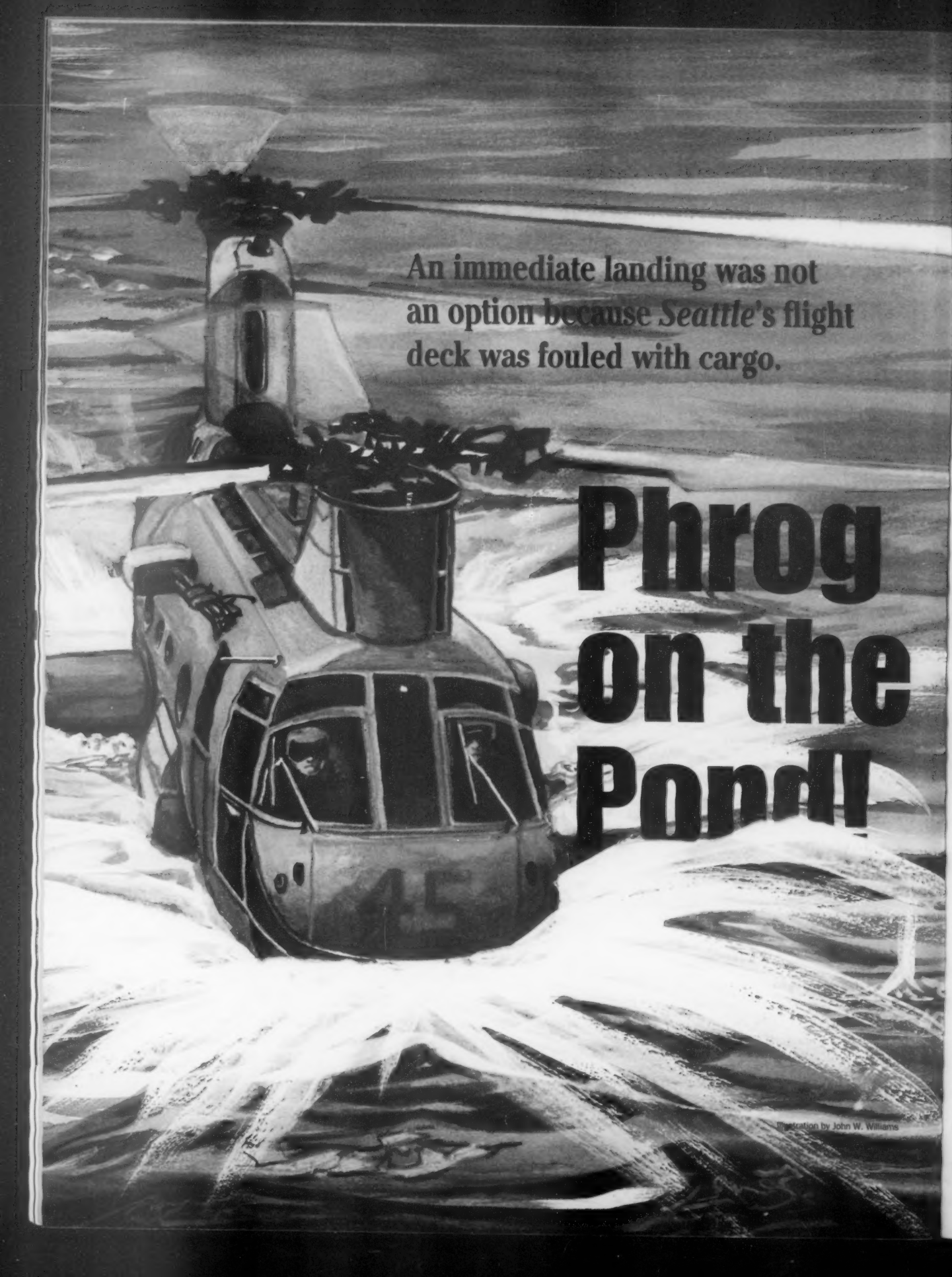
I anxiously set the radio to Gary Tower's frequency 10 miles out, hoping to get the feel of the traffic flow so I could sequence in without delay. There was no traffic; however, the weather was miserable. I called early for special-VFR entry and got clearance.

There was one small airfield, not tower controlled, six miles from Gary and directly in our path. Normally, you should dial in the Unicom frequency to listen, or to broadcast a "passing through" call. But the uncontrolled field was so close to the field with radar coverage that I figured I'd get a traffic

call in the unlikely event someone was up. There was no need to talk this time, because no light-civil pilot would be stupid enough to be flying on a day like...

Out of the gray mist, a white Cessna 172 appeared dead ahead. Incredibly enough, someone was in their local bounce pattern. The Cessna was at 300 feet, on a left downwind. I zipped behind him, no jinking maneuver required. But as I blasted over the small strip, I imagined what would have happened had the plane been somewhere else in its own pattern when I went through. 

Maj. DeHart flies with HMLA-773.



An immediate landing was not  
an option because *Seattle's* flight  
deck was fouled with cargo.

# Phrog on the Popoff

Illustration by John W. Williams

by Lt. W.D. Hoyt

I WOKE UP AT 0235 for a 0315 brief on board USS *Seattle* (AOE 3). The hangar was hot and humid, and my flight suit was drenched as I climbed down from preflighting the rotorheads. After the brief, the copilot and I manned up Bayraider 52 while still in the hangar.

My copilot had been in the squadron about two weeks, and this was his second real vertrep. As soon as the other aircraft took off and reported ops normal, the maintenance team pushed our aircraft onto the spot. We were resupplying USS *George Washington* (CVN 73) with bombs and ammunition that day, normally a fun and rewarding mission that we all looked forward to, even if it did mean waking up very early.

Everything was fine until we started the engines and the No. 2 engine peaked below 500 degrees. While there was nothing wrong with this reading, we had usually been seeing peaks near 700 degrees since we had been in the Puerto Rico area – more than a week at this point. We decided to engage the rotor system and keep a close eye on that engine.

As I expected, once the rotors were engaged, the No. 2 engine hung up at about 82 percent Ng – very likely a P3 signal loss to the fuel control. The crew chief opened that engine bay door and confirmed our suspicion: the P3 line wasn't tight. With the rotors still engaged, we shut down the engine, and he torqued down the fitting. Before I asked, he also checked the No. 1 engine and reported the line was tight.

As the crew chief finished closing the engine bay doors, my copilot and I completed our takeoff checks, and three minutes later, we were airborne on what would become one of the scariest flights any of us would ever experience.

We took off at 0500, 45 minutes before sunrise. As we climbed away from the ship, I checked the engine instruments and the circuit breakers. Our SAR crewman looked for possible leaks and any other indications in the back that something might be wrong with the aircraft. A moment later, we reported all was normal, and I called the tower, "Ops norm, four souls, one hour and forty-five minutes of fuel."

The tower from each ship replied they were ready to start the vertrep. The aircraft carrier was approximately 200 yards to port of *Seattle*. Our sister aircraft, Bayraider 53, called inbound for the first pick, and we turned in toward *Seattle*'s flight deck to follow them.

Bayraider 53 set down the first load on the *GW*'s fantail, and I could see that our aircraft was still nearly a mile astern. I called Bayraider 53 and told them to make another pick, after which we'd follow them. The crewmen rigged the "hell hole" – a cargo hatch in the belly of the aircraft where we hook up the external loads – and I took the controls to slide over the deck with the nose to port.

The first crewman was in the hole and reported, "Load hooked up, hookup man clear."

Before I began to pull power to lift the load, my copilot reported 90 percent Nr (normal rotor speed is 100 percent). I called to release the load while I tried to read the gauges. I hadn't heard any power reduction or even rotor speed decay. It seemed the No. 1 engine indications were lower than No. 2, but not greatly.

"Load's away, hook's clear," the crewman called.

An immediate landing was not an option because *Seattle*'s flight deck was fouled with cargo. All I could do was to get single-engine airspeed before things got worse. As I steered the aircraft away from the stern of the carrier, I heard the first crewman urgently say, "Close up the hell hole."

As we passed below the ramp of the carrier, I was distantly aware of at least two "Power!" calls over the radio. I could hear rotor speed winding down rapidly, and I knew we hadn't reached single-engine airspeed. The copilot had already armed emergency throttle, and he continued calling out the Nr as it decreased though 80 percent. I told him to start the APU for electrical power in case the generators dropped off line.

I was trying to attain between 70 and 75 knots, at which speed the aircraft requires minimum power to remain airborne. The APU started to wind up, but after several seconds it quit, and at nearly the same time, the rotor speed decayed below 68 percent, causing the generators to drop off-line.

I thought the battery must be off, but I obviously couldn't let go of the controls to move the switch. Without a battery we had no ICS, so I couldn't tell my crew what was wrong. The cockpit was completely dark except for our lip lights. The automatic flight-control system (AFCS) had been lost with the generators. I realized Nr was now around 65 percent and we were too close to the water to chance continuing to forward flight. If we struck the water at this speed, we might be killed, and the crash would certainly compromise the aircraft's watertight integrity.

I flared, allowing the helicopter to settle into the water. I eased the nose forward to keep water from washing over the ramp. We were now between one-quarter and one-half mile off the carrier's port quarter. As I tried to reduce the collective to increase rotor speed, I became aware that the collective trim had frozen because of the loss of electrical power, and the collective was set near maximum. I pushed the collective toward the floor and Nr immediately came back up to over 100 percent.

A wave that seemed as high as the glare shield rolled toward the nose, and I could feel salt spray coming through my window as I brought the collective up. The helicopter rose out of the water and again the rotor speed began to decay. While I worked to turn the aircraft into the wind, the copilot again tried to start the APU in hopes of restoring electrical power. When we hit the water, the rescue hatch, which covers the hell hole in the belly of the aircraft, blew open and the aircraft rapidly began taking on water.

If the rescue hatch remained open, we would have no chance of saving the aircraft, so with no thought for his own safety, the first crewman raced aft to close the hatch. As electrical equipment immersed in about 3 feet of water sparked all about them, both crewmen charged into the onrushing water and pulled the hatch closed.

With the second crewman standing on the door, the first crewman closed the locking pawls. Once again, I increased collective and began to gain forward momentum. After another brief moment in the air, for the third

and final time I allowed the helicopter to set back into the water to regain rotor speed. When we were in the water, the first crewman came forward to help the copilot start the APU. I lifted the aircraft from the water and at the same time increased our forward speed. I could now hear the copilot reporting Nr and airspeed, and we had some of the instrument lights. We continued to climb and accelerate.

"Seventy-five percent Nr, thirty knots," my copilot called. "Seventy percent Nr..."


I lowered collective for an instant and the rotor speed increased.

"Seventy-five percent Nr, forty knots..."

I could now see the carrier to the left and I gently turned toward it. Each time my copilot reported Nr at 70 percent, I momentarily lowered collective, allowing the Nr to increase. We could now see the carrier's flight deck, and as if on cue, the air boss came over the radio, "The fantail is open if you need it."

After a few more seconds, we came into a high hover over the center of the fantail and the second crewman called me down. Once again, the rotor speed began to decay, but several seconds later we landed safely aboard the carrier. As I reduced collective for the last time that day, Nr increased

above 100 percent, and I looked at our gauges. All the copilot's instrument lights were out and several of my own were dark. It was only 0515. While the flight-deck handlers put in our chocks and chains, we tried to push in several of the circuit breakers.

I noticed the No. 1 engine's Ng in the low 80s and asked the crew chief to check the P3 line on the No. 1 engine again. A moment later, he reported the line was still snug. After another moment of checking the engine, however, he suggested we shut it down for a potential crack in the power-turbine exhaust casing. We shut down the engine and waited for an amber deck from tower to disengage the rotors. 

Lt. Hoyt flies with HC-8.

*An EI should determine the cause of the engine failure. — Ed.*

**A wave that  
seemed as high  
as the glare  
shield rolled  
toward the  
nose, and I  
could feel salt  
spray coming  
through my  
window...**



It takes about 80,000 rivets,  
30,000 washers, 10,000  
screws and bolts to help  
make this aircraft fly...

and one nut  
to destroy it.

**FOOD**

Visit our web page at: [www.norfolk.navy.mil/safecen](http://www.norfolk.navy.mil/safecen)  
PHAA Joseph Strevel USS George Washington (CVN 73)



## Milestones

Class A mishap-free flight hours

| Command             | Date     | Hours   | Years |
|---------------------|----------|---------|-------|
| USCGAS Port Angeles | 03/28/97 | 20,000  | 9.9   |
| VR-57               | 04/01/97 | 96,400  | 19.3  |
| VFA-204             | 07/01/97 | 58,500  | 16.5  |
| VR-1                | 07/01/97 | 37,700  | 17.5  |
| VR-58               | 07/01/97 | 102,000 | 19.8  |
| VFA-146             | 07/17/97 | 50,500  | 12    |
| VAW-117             | 07/28/97 | 44,050  | 20    |
| VP-26               | 08/03/97 | 259,000 | 35    |
| HC-85               | 09/01/97 | 49,200  | 18.8  |
| HS-75               | 09/01/97 | 42,000  | 22.8  |
| VF-211              | 09/02/97 | 38,700  | 11    |
| VP-8                | 09/22/97 | 120,700 | 19    |
| VF-143              | 09/23/97 | 33,400  | 9     |
| VAW-125             | 10/02/97 | 57,600  | 29    |
| HMLA-169            | 10/08/97 | 25,500  | 5     |
| VP-9                | 10/27/97 | 119,200 | 19    |



## Class A M

The Navy and Marine Corps had 24 Class A flight and flight-related mishaps on

| Aircraft   | Date     | Command      | Fatalities |
|--|----------|--------------|------------|
| AV-8B  | 08/11/97 | VMA-542      | 0          |
| The engine failed, and the pilot ejected; the Harrier crashed into the ground. |          |              |            |
| SH-60B   | 08/16/97 | HSL-49       | 0          |
| The helo spun on takeoff striking the flight deck and the water.               |          |              |            |
| F-14A  | 08/31/97 | VF-154       | 0          |
| The Tomcat crashed into the water after a night cat shot; crew ejected.        |          |              |            |
| FA-18C   | 09/14/97 | VFA-15       | 1          |
| The Hornet crashed while maneuvering through a canyon.                         |          |              |            |
| FA-18D   | 09/15/97 | VMFA(AW)-224 | 2          |
| The Hornet crashed into the water during a night CAS mission.                  |          |              |            |

# BRAVO

Lt. Ron Dennis  
Lt. Marc Valadez  
Lt. Chris Ruggeri  
Lt. Greg Fulco



VAW-112

After a short delay at the hold-short of El Centro's runway 30, Ghost 601 was cleared for takeoff into the night FCLP pattern. Lt. Dennis (PAC) made a roll-and-go into the moonless night. On the roll, Lt. Valadez (copilot and CAPC) called go speed of 100 knots. At 110 knots, Lt. Dennis rotated, but as the nosewheel lifted, the right engine gave two violent surges then failed.

To complicate matters, the autofeather system didn't feather the prop. Ghost 601's right engine had failed at what is arguably the most critical phase of flight. This situation is a standard scenario that crews practice countless times in the simulator and during FRS training flights, as well as in fleet squadrons.

Committed to takeoff, Lt. Dennis made

BZs require an endorsement from the nominating squadron's CO and the appropriate CAG, wing commander or MAG commander. In the case of helo dets, the CO of the ship will suffice. A squadron zapper and a 5-by-7-inch photo of the entire crew should accompany the BZ nomination. Please include a squadron telephone number so we can call with questions.

sure the power levers were at maximum, established a very shallow climb, and immediately raised the gear as he told the crew of the situation.

With the right propeller windmilling and the outside air temperature at 90 degrees, the E-2C would neither accelerate past 120 knots or climb past 100 feet AGL. Lt. Dennis leveled off and called for Lt. Valadez to feather the right engine. While Lt. Dennis maintained level flight and tried to accelerate to the best single-engine climb speed of 135 KIAS (V2), the copilot feathered the right propeller using the emergency shutoff handle with Lt. Dennis' agreement.

Once the propeller was feathered, Lt. Dennis told Lt. Valadez to declare an emergency. The Hawkeye slowly accelerated to V2, and Lt. Dennis established a shallow climb while starting a gradual turn downwind. Leveling at 900 feet AGL on downwind, Lt. Dennis asked his copilot to review and verify that all the emergency procedures for shutting down the engine were completed.

Next, Lt. Valadez asked Lt. Ruggeri and Lt. Fulco (switch pilots riding in the tube) to call out the post-shutdown procedures. The crew flew the approach and made a single-engine arrested landing.



## Mishaps

on 17 July for FY97. The following mishaps occurred since 11 August 1997:

| Aircraft   | Date     | Command      | Fatalities |
|--|----------|--------------|------------|
| EP-3E  | 09/23/97 | VQ-2         | 0          |
| The Orion left the runway during landing rollout.              |          |              |            |
| F-14B  | 10/02/97 | VF-101       | 1          |
| The Tomcat crashed at sea; the aircrew ejected.                |          |              |            |
| AV-8B  | 10/16/97 | VMA-542      | 0          |
| The Harrier crashed into the ground; the pilot ejected.        |          |              |            |
| AV-8B  | 10/24/97 | VMA-311      | 0          |
| The Harrier crashed in the landing pattern; the pilot ejected. |          |              |            |
| T-45A  | 11/20/97 | COMTRAWING-2 | 0          |
| Two Goshawks collided on the runway during formation takeoff.  |          |              |            |

## Class A Flight Mishap Rate

|              | FY98* thru 11/30/97 |      | FY97 thru 11/30/96 |      |
|--------------|---------------------|------|--------------------|------|
|              | No.                 | Rate | No.                | Rate |
| Navy/Marine  | 4                   | 1.72 | 6                  | 2.55 |
| All Navy     | 2                   | 1.08 | 3                  | 1.61 |
| All Marine   | 2                   | 4.18 | 3                  | 6.14 |
| NAVAIRLANT   | 1                   | 1.96 | 1                  | 1.83 |
| NAVAIRPAC    | 0                   | 0.00 | 0                  | 0.00 |
| MARFORLANT   | 1                   | 7.04 | 1                  | 6.70 |
| MARFORPAC    | 1                   | 4.55 | 2                  | 8.93 |
| NATRACOM     | 1                   | 1.81 | 2                  | 3.23 |
| NAVAIRES     | 0                   | 0.00 | 0                  | 0.00 |
| 4th MAW      | 0                   | 0.00 | 0                  | 0.00 |
| NAVAIRSYSCOM | 0                   | 0.00 | 0                  | 0.00 |
| Non-MARFOR   | 0                   | 0.00 | 0                  | 0.00 |
| Non-TYCOM    | 0                   | 0.00 | 0                  | 0.00 |

\*FY98 data subject to change.



Capt. P.M. Pastino  
Cpl. C.E. Slaven  
Cpl. M.D. Cain  
Sgt. C.C. Denney  
1stLt. P.S. Broderick

### HMM-164 (REIN)

Knightrider 32, a UH-1N, was flying a training mission in support of JTFEX 97-2 near Santa Catalina Island. After four hours, Capt. Pastino (HAC) noticed a master-caution light illuminate briefly, then go out. Twenty seconds later, the same light, the corresponding chip-detector light and transmission-chip segment lit up. Twenty-five miles from the ship and seven miles from the island, Capt. Pastino opted for terra firma and established himself on a profile for impending transmission failure.

Within a minute, and still five miles from land, the transmission began growling as its pressure dropped below 5 psi and the temperature pegged.

Noting the rapidly deteriorating situation, the HAC decided to land at the nearest landfall instead of the civilian airfield some five miles across the island, which would involve climbing 1,500 feet.

The copilot, 1stLt. Broderick, pulled out the NATOPS and confirmed the immediate-action procedures as he selected guard on

the radios. Capt. Pastino called, "Mayday," and another aircraft heard him. Four miles offshore, a torque split developed between the No. 1 engine and the No. 2 engine, which increased to 42 percent. Fuel flow started to fluctuate rapidly before falling to 200 pph.

One mile from shore, the crew heard a loud "pop" and extreme rattling from the transmission. Capt. Pastino gave the command to jettison and prepared for ditching. Sgt. Denney (crew chief) and Cpl. Slaven (aerial observer) began jettisoning gear and deploying the raft, while Cpl. Cain (aerial observer) monitored the instruments.

Close to shore, Capt. Pastino struggled with insufficient tail-rotor control but made a no-hover landing just above the high-water mark on a small beach.

As he reduced collective during the normal shutdown, the transmission failed. Inspecting the aircraft, the crew found the rotor-brake disk had 2 inches of lateral play. The puck assembly and 10 of the 15 ball bearings were gone, and there was less than one quart of transmission fluid remaining.

A maintenance crew replaced the transmission, and the aircraft was back in service within 48 hours. An EI is being conducted to determine the reason the transmission failed.





GPXB C9Y055



# An ORM Tale: Three Came Back

by LCdr. Trey Turner



**T**HE WORK-UP CYCLE continued and the next at-sea period was days away. The squadron had to produce 13 fully mission-capable aircraft. All the maintenance personnel were working 12 hours on and 12 hours off through the weekend.

The biggest obstacle was bad weather. The functional-check flights were stacking up. It was winter in Virginia Beach, when weather patterns are unpredictable at best. When a system does move through, you can usually count on overcast conditions with occasional low ceilings. The pressure to fly the check flights was intensifying.

OPNAV 3710.7Q gives a commanding officer some latitude in determining if check flight should be flown:

Functional-check flights should be conducted during daylight hours within the local flying area in VMC and under VFR. If necessary, to accomplish the assigned mission, unit commanders may authorize check flights under conditions other than the above if in their opinion the flight can be conducted with an acceptable margin of safety under the existing conditions.

By now, the ship was under way with the majority of our tools, parts and maintenance personnel. Only a small cadre of skilled, hard-working maintenance people had been left behind. The first available aircraft had already flown aboard to begin CQ, and additional overhead times were expected the following day.

The check-flight crews were in early that morning, standing by to man up at the first sign of a break in the weather. These crews consisted of the CO, XO, and four of the five department heads for three FCFs.

For the second day in a row, the base meteorological office was reporting 700-foot overcast conditions. Having less than optimal FCF weather, the crews busied themselves with the personal and administrative details.

As the day progressed, the crews watched the weather, constantly looking out windows and calling metro.

The skipper was the first to notice the large patches of blue sky peering through the clouds and quickly handed out the latest weather forecast: improving conditions. All the crews dropped what they were doing and hustled into their flight gear. As they walked outside to man up, the

large patches of blue had gotten a little smaller. Sunset was also right around the corner.

On one hand, we had the operational requirement to complete the FCFs and get the jets out to the ship. On the other hand, we had marginal weather that could be getting worse, and the sun was sinking on the horizon. This

is where we should have started applying operational risk management.

When does the little voice in the back of your head become loud enough for you to hear it? In this situation, with the vast amount of experience in each cockpit, the voices should have been yelling.

They weren't.

All three aircraft launched, and while airborne the field went IFR. The little voices were finally heard, and the crews recognized the risks. The F-14s returned to the field on instrument approaches.

The pressure of operations, or any kind of pressure, either perceived or real, can cloud your judgment. The key is to manage the risk and reduce it to a workable level. Ideally, when the risk becomes too great, a reasonable person will recognize this fact, discontinue the task, and apply this data to the next scenario.

In most cases, aircrew debriefs after an FCF are rare. However, these crews had a lengthy discussion. Afterward, a definitive policy was established that would affect the go-no-go criteria for future FCFs in this squadron. Below are a few of these new SOPs.

1. For "A" or "B" profiles, the aircraft must be airborne one hour before official sunset.
2. In no case will an FCF land later than 15 minutes after official sunset.
3. "A" and "B" profiles must be done in VMC or clear of clouds, with forecast ceiling and visibility of at least 3,000 feet and 5 miles.
4. "C" profiles must have forecast weather that will allow for a VFR departure and arrival (1,500 and 3 at NAS Oceana) and be conducted clear of clouds.
5. The aircrew will not launch if they can not be reasonably sure of completing the profile given the weather and time constraints described above.

LCdr Turner flew with VF-41. He is now assigned to VFC-12.

# Bird Strike Over

**"Yeee-haah!"**

by Lt. Mike Halsey

WE'RE HAVING SOME FUN NOW! Look at that beautiful Kuwaiti landscape whip by. Hey, that dude is waving at us.

No, the other one, with the blue sunglasses. Do they love us here or what?"

"Thud!"

"OK, bird strike, game over, men. We're climbing. When was that mid-cycle recovery, anyway?"

So ended our ill-fated RAGEX. What a bummer.

The day had started off so well. Our party of

four was scheduled for a standard escort mission into bad-guy country. Morning launch, meet our fighter bubbas

on the tanker more than an hour later for max front-side gas, then head north together on a double-cycle photo safari – real simple. Too simple for this hard-charging crew, in fact. We figured that with so much time before our Texaco rendezvous, we could knock out some valuable low-level training over the friendly territory.

At 500 feet AGL and 420 KIAS, I spotted the feathered kamikaze just before he smacked into my thunder wagon. (Nothing I could do, really—it was him or me.) Just before the barely audible impact, I judged his blurry vector to be headed up and over my left shoulder. I immediately pulled the jet into a steep decelerating climb, retarded both throttles toward idle, and scanned my engine instruments while turning south toward the CV some 120 miles away.

**...the little golf-ball dent had grown into a cantaloupe-sized crater.**



My priorities were to assess any engine or airframe damage, get a visual check by some air-wing Hornets I knew to be rendezvousing nearby, then decide on the best place and time to land. Throughout those first tense moments, I also had time to feel slightly guilty for tooling off on a good-deal joy ride before our high-visibility ATO mission.

My anxiety began to lessen as we leveled off. We couldn't see any airframe damage, engine instruments were normal, and our radar was giving an uncommonly clear ground picture. These data bits supported my initial perception that the birdie had merely glanced off of my sturdy Grumman's canopy bow. I felt a bit more comfortable with my jet's condition, and as a crew, we opted to proceed instead to the briefed tanker orbit (only 40 miles away) for a visual check by our Tomcat friends. This route would keep us on top of two good divert fields in case of any surprises, and the extra gas would prevent us from having to buster back for the mid-cycle recovery. Every decision seemed logical up to this point.

As I joined on the KC-135-F-14 gaggle a few minutes later, my ECMO 3 (rear left seat) began talking with the duty Hawkeye regarding our mission status. I was too busy to monitor a third radio, but the info relayed to me indicated that the E-2 wanted to strip the mid-cycle EA-6B from his mission to cover our TARPS escort, if we weren't going to make it.

"What a hassle," I thought as I pondered the requisite comm nightmare involved with passing a complete mission brief over the radios from one Prowler to another with so little time. I felt

# r the Bedouins



PH3 Douglas E. Houser

the schoolboy guilt coming on again for our unscheduled low-level shenanigans, and imagined the negative juju our squadron would suffer for blowing a high-visibility mission and forcing an inflight flex on many other strike-fam events.

Just as pressure mounted to make the tough call to abort, our fighter brethren gave us a close check followed by a positive diagnosis.

"You've got a very small dent at the high 10 o'clock position of your radome, but no damage anywhere else," the lead Tomcat pilot reported.

This good news made me think of the brand-new possibility that we could avoid a lot of post-flight ugliness by just pressing on to get the admiral his pictures. I prompted our inflight examiner for some more reassurance.

"You see any penetration, however slight?" I asked.

"Nope, it's pretty shallow and only about the diameter of a golf ball. I don't think you'll have any problem pressing on, if that's what you are asking."

That was exactly what I was asking and the answer I wanted to hear. I quickly rationalized that if that dent were prone to caving in, it would have done so when we were still hauling the mail right after impact. Ultimately, we told the E-2 we were a full-up round and would complete our assigned tasking (like real men, was the unspoken inference).


We forged on into "light green ink" territory. We modified our profile somewhat to avoid high indicated airspeeds, and supported the TARPS jets through their entire threat-ridden photo route. My 250-knot break back at the

ship was less than impressive, but if memory serves me correctly I logged an OK-3 (like all good authors of safety articles) and felt good as I parked the Prowler on cat 2 and climbed out. I figured the crowd gathered around my aircraft's nose was just the welcoming committee for the Top Gun heros.

Not exactly. As it turned out, the little golf-ball dent had grown into a cantaloupe-sized crater. Nothing had blown through, but the shattered fiberglass inside appeared to be held together by nothing more than liberally applied grey paint (I always knew those "Do Not Paint" stencils were a bad idea). This thing looked like it could implode at any second, at any airspeed.

Many grim scenarios passed through my head as I pondered the possible ramifications of major damage to the aircraft or an engine while flying over our recent geographic track.

Later, my skipper made it clear that he saw no valid reason to take a damaged aircraft into unfriendly skies, and went on to restate his "safety first in peacetime" position before the whole ready room. He was right, no doubt about it. Why did I press on? I don't know, call it the ill effects of groupthink, I-can-hack-it-itis or just misdirected JO enthusiasm. Surprisingly, during our lengthy debrief, I learned that two of my crewmates assumed all along that we would press on despite the bird strike.

I don't blame the F-14 pilot who gave us the visual BDA; he called the picture like he saw it, and he was as surprised as we were to see how the damage had spread during a benign flight. In the end, a combination of influences prompted me to deviate from my initial instincts and subsequently take unwarranted risks with my aircraft and crew. 

Lt. Halsey flies with VAQ-136.

# Bird Strike Over

**"Yeee-haah!"**

by Lt. Mike Halsey

WE'RE HAVING SOME FUN NOW! Look at that beautiful Kuwaiti landscape whip by. Hey, that dude is waving at us. No, the other one, with the blue sunglasses. Do they love us here or what?"

"Thud!"

"OK, bird strike, game over, men. We're climbing. When was that mid-cycle recovery, anyway?"

So ended our ill-fated RAGEX. What a bummer. The day had started off so well. Our party of four was scheduled for a standard escort mission into bad-guy country. Morning launch, meet our fighter bubbas

on the tanker more than an hour later for max front-side gas, then head north together on a double-cycle photo safari – real simple. Too simple for this hard-charging crew, in fact. We figured that with so much time before our Texaco rendezvous, we could knock out some valuable low-level training over the friendly territory.

At 500 feet AGL and 420 KIAS, I spotted the feathered kamikaze just before he smacked into my thunder wagon. (Nothing I could do, really – it was him or me.) Just before the barely audible impact, I judged his blurry vector to be headed up and over my left shoulder. I immediately pulled the jet into a steep decelerating climb, retarded both throttles toward idle, and scanned my engine instruments while turning south toward the CV some 120 miles away.

**...the little golf-ball dent had grown into a cantaloupe-sized crater.**



My priorities were to assess any engine or airframe damage, get a visual check by some air-wing Hornets I knew to be rendezvousing nearby, then decide on the best place and time to land. Throughout those first tense moments, I also had time to feel slightly guilty for tooling off on a good-deal joy ride before our high-visibility ATO mission.

My anxiety began to lessen as we leveled off. We couldn't see any airframe damage, engine instruments were normal, and our radar was giving an uncommonly clear ground picture. These data bits supported my initial perception that the birdie had merely glanced off of my sturdy Grumman's canopy bow. I felt a bit more comfortable with my jet's condition, and as a crew, we opted to proceed instead to the briefed tanker orbit (only 40 miles away) for a visual check by our Tomcat friends. This route would keep us on top of two good divert fields in case of any surprises, and the extra gas would prevent us from having to buster back for the mid-cycle recovery. Every decision seemed logical up to this point.

As I joined on the KC-135-F-14 gaggle a few minutes later, my ECMO 3 (rear left seat) began talking with the duty Hawkeye regarding our mission status. I was too busy to monitor a third radio, but the info relayed to me indicated that the E-2 wanted to strip the mid-cycle EA-6B from his mission to cover our TARPS escort, if we weren't going to make it.

"What a hassle," I thought as I pondered the requisite comm nightmare involved with passing a complete mission brief over the radios from one Prowler to another with so little time. I felt



# r the Bedouins



PH3 Douglas E. Houser

the schoolboy guilt coming on again for our unscheduled low-level shenanigans, and imagined the negative juju our squadron would suffer for blowing a high-visibility mission and forcing an inflight flex on many other strike-fam events.

Just as pressure mounted to make the tough call to abort, our fighter brethren gave us a close check followed by a positive diagnosis.

"You've got a very small dent at the high 10 o'clock position of your radome, but no damage anywhere else," the lead Tomcat pilot reported.

This good news made me think of the brand-new possibility that we could avoid a lot of post-flight ugliness by just pressing on to get the admiral his pictures. I prompted our inflight examiner for some more reassurance.

"You see any penetration, however slight?" I asked.

"Nope, it's pretty shallow and only about the diameter of a golf ball. I don't think you'll have any problem pressing on, if that's what you are asking."

That was exactly what I was asking and the answer I wanted to hear. I quickly rationalized that if that dent were prone to caving in, it would have done so when we were still hauling the mail right after impact. Ultimately, we told the E-2 we were a full-up round and would complete our assigned tasking (like real men, was the unspoken inference).


We forged on into "light green ink" territory. We modified our profile somewhat to avoid high indicated airspeeds, and supported the TARPS jets through their entire threat-ridden photo route. My 250-knot break back at the

ship was less than impressive, but if memory serves me correctly I logged an OK-3 (like all good authors of safety articles) and felt good as I parked the Prowler on cat 2 and climbed out. I figured the crowd gathered around my aircraft's nose was just the welcoming committee for the Top Gun heros.

Not exactly. As it turned out, the little golf-ball dent had grown into a cantaloupe-sized crater. Nothing had blown through, but the shattered fiberglass inside appeared to be held together by nothing more than liberally applied grey paint (I always knew those "Do Not Paint" stencils were a bad idea). This thing looked like it could implode at any second, at any airspeed.

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Lt. Halsey flies with VAQ-136.

# Walking Is a



Sensing the aircraft's downward movement, the LSO called, "No lower, no lower." But the helo kept going down.

# Like a Duck Good Thing

by LCdr. D.H. Fillion

**T**he SEA STATE WAS 2, the moon was full, and we were eight experienced LAMPS pilots regaining our RLQs (Rast Landing Qualifications) on board an Aegis-class cruiser. Sure, a majority were O-4s, but what would you expect on a full-moon night? We had six fleet guys and a pair of category 2 FRS students, meaning everyone knew what they had to do. There was also a lieutenant who had eagerly volunteered to go with us and do nothing but be the LSO for six hours.

The RLQ period developed as they always do: the ship wasn't at the rendezvous point. To establish comms with mother, we had to fly by the bridge and wave at the OOD. And to add insult to injury, homeplate reminded our intrepid group that the field closed at 2300, regardless of our whereabouts.

Like any salty aviators, we pressed on in our three helos, got to the ship, and started the RLQs. I had won the draw at the brief and got the chance to fly out to the boat, thereby becoming the first to complete the quals. Having spent most of my underway time in FFGs, I spent the next 25 minutes strolling around the deck of the Aegis acting like I knew how to get to the LSO shack.

I finally reached datum, grabbed the other headset, and sat back as the lieutenant skillfully conned helo after helo into the trap. I noticed several things during this period. First, the old guys were doing pretty well. The moon was so bright that we discussed using our dark visors, but we finally decided against it. Why ruin a good thing?

Second, the experienced O-3 was moving quickly through the conning procedures. Third, the two hookup men on this ship were both at least 6 feet, 6 inches tall.

As the next SH-60B came across the deck, I reflected on my past tour and thought this was sure more fun than being in Washington. The pilot positioned his Seahawk perfectly over the left portion of the flight deck and lowered the messenger cable. This cable is attached to the haul-down cable and is then retrieved back into the helicopter for securing the helo to the rapid-securing device (RSD) on deck.

As the cable touched the deck, the big twins scurried out. While they were trying to attach the two cables, the PAC noticed his hover was slightly higher than the horizontal attitude reference system (HARS), and he started lowering his aircraft into a better position.

Sensing the aircraft's downward movement, the LSO called, "No lower, no lower." But the helo kept going down. Raising his voice, the LSO shouted, "No lower!" At about this time, the lead hookup man connected the cable, and the safety man started backing him out.

As the hookup men backed out from under the aircraft, the safety observer caught the LSO's eye. Standing off to one side, I could see the startled expression on the young Sailor's face. I just assumed this was one of his first ever RLQs and that he was just getting accustomed to being near aircraft. So what was the point?



As the RLQ began winding up, I headed back to the hangar in a much more expeditious manner. Back in the hangar, I overheard two members of the fire party arguing about helicopters and heads. I offered my years of expertise on the subject of rotorheads, but I was surprised when the Sailors told me they had absolutely no interest in rotorheads, but rather in the combination of one helicopter and someone's head.

A chief once taught me a valuable lesson: "Sometimes it is better to just listen to the troops instead of throwing a thousand questions at them."

It turned out that the hookup man had looked confused because the bottom of the SH-60B had hit his head while his partner tried to connect the cables. Granted, these two Sailors should be on the all-Navy basketball team, but the catastrophes that might have occurred are not pleasant to contemplate.

I still had some doubt, so I waited for the hookup men to return to the hangar and confronted them. Their story made me a believer. We all re-manned our respective

helos for the flight home. We returned at 2310 and begged for the field to stay open. Base ops was on our side, and we landed safe and sound.



**...the hookup man had looked confused because the bottom of the SH-60B had hit his head while his partner tried to connect the cables.**

I told my RLQ buddies about the ship's hookup men, and they were stunned, wondering how something like that could have happened. As we discussed the events of the evening, we solved the mystery. When the LSO called, "No lower," the helicopter aircrew thought he was saying, "Go lower." They recognized his command as non-standard and ended their descent just as the first-ever SH-60B and Sailor's head mark-on-top was completed.

Bad things could have happened that night. Always use voice calls—such as "Easy up," or "Steady"—over the deck. If something is non-standard, hold your position and get clarification. Anyone who has cruised with a RAST-capable ship has a story about our inability to evacuate or communicate with the hookup men once they are under the aircraft. Let's face it. They are the bravest members of any flight-deck crew. When was the last time you went out and stood under a hovering helicopter?

Beginning with the first week of work-ups, stress the importance of the safety man in the hookup team, and how he must constantly scan the LSO and hookup partner. Exercise waving the team off the flight deck, and ensure they understand how much cable they should see on the deck and what hover altitude should look like during the hookup phase.

As for those two big guys, they are still out there, hooking up aircraft, but the last time I went on board, I saw them duck-walking out to do the job.

LCDr. Fillion is the OinC for HSL-44's Det 4.







# Delta 4? There Goes Our Good Deal!




THE MCCLURE

**M**y NUGGET PILOT AND I BRIEFED what sounded like a good-deal hop – day launch, bomb-smoke-SSC and return for a pinky recovery. The bombing and the subsequent SSC mission went as briefed with no hitches. We then headed to the marshal fix and prepared for our pinky trap. We completed our checks and were going to hit the fix on time, but just as we approached it, marshal gave a Delta 4 call. After a couple of minutes of waiting, we received a new push time.

We pushed on the standard CVN-XX radar vector recovery, which included several heading and airspeed changes as we descended. At about 14 miles from the ship, still descending, we started to dump down in preparation for being max trap on the ball. Approach tried to give us a heading change, but their transmission was garbled. It was unclear of what the controller was setting us up for because of the previous directions. I finally regained good communications with him, and he put us on the heading to intercept the final bearing.

We were now approaching 10 miles, and I noticed that the fuel gauge showed 4,200 pounds, 1,800 pounds below max trap.

“Dumps off!” I yelled over the ICS. After a few expletives to myself, we looked at each other, dumbfounded. How could both of us forget the dumps? We regained our composure and continued the approach. We were lucky we hadn’t dumped below tank fuel and still had enough gas for the approach. It still looked grim, not the kind of pressure a nugget pilot needed. But things worked out, and he flew an outstanding pass and trapped.

After finishing the paperwork, we debriefed what had happened. Why did our crew coordination fall apart? A couple of things came to mind. One was the breakdown of our primary scan. As we started the descent, our regular routine was broken by the irregular directions that approach was giving us, as well as the garbled radio communications. Next, both of us assumed that the other was monitoring the fuel as usual. When things changed from our established routine, we should have delegated who would concentrate on the fuel and other important tasks. Instead, we let this problem overload us. 

Lt. Marone was a BN with VA-95 at the time of this story. He now flies with VAQ-138.



Peter Mersky  
color - Laurinda Mink

I could  
oil coated  
eliminating

# Never Fly

by Lt. Harold H. Gunji

**W**HAT DO TWO S-3B AVIATORS do when they are on predeployment leave? Fly, of course. On that sunny, warm spring day in Florida, I (an S-3B NFO who also flies privately) invited a good friend and squadronmate (an S-3B pilot and former CAG paddles) to join me in a relaxing day of flying and sightseeing in my flying club's T-34B Mentor. The flying club owns two of these gems in fine flying condition, despite the fact they are more than 40 years old.

We briefed the hop, concentrating on the differences between the comfortably familiar T-34C Turbo Mentor and our version (no turbo). Scott had never flown the T-34B and was not familiar with the reciprocating engine's prop controls. We also discussed engine-failure procedures. The club's Mentors don't carry parachutes and of course, have no ejection seats.

We took off, and as we approached our first level-off altitude of 1,200 feet MSL, I reduced throttle and tried to reduce the propeller rpm to a cruise setting. I noticed the prop rpm gauge read an unusually high 3,000 (400 rpm above the NATOPS limit). Scott confirmed the high reading from his instruments.

Unable to reduce prop rpm and knowing prop overspeed was an emergency condition, I turned back to the field. Before we completed the turn, however, the prop-shaft seal blew and engine oil spewed from the engine, completely covering the windscreen as well as both sliding canopies.

I could not believe how quickly and completely the oil coated every square inch of canopy, completely eliminating any visibility.

So, there we were, at 1,200 feet, completely IMC in a VFR-only airplane (not even a gyro). While trying to stay pointed toward the field and maintain altitude, I declared an emergency and fought to open my canopy. I could open it, but the slipstream kept slamming it shut. For some reason, it would not latch in the open position.

Scott opened his canopy, only to find that the rear cockpit sucked in all the oil streaming aft. He found that opening it six inches (the detente) provided a good compromise between maintaining a horizon and keeping hot oil from streaming into his face. He still didn't have enough however, to give him forward visibility to land the aircraft from the back seat.

Having to time-share between flying, landing checks, fighting the canopy, and not knowing how many more seconds of engine



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# the Mentor Alone

life remained, we set up for an immediate VFR approach to the active runway. Scott was great. He provided suggestions, answers, and a calm voice in the cockpit. Tower offered us the off-duty runway, which provided a direct entry, but would have given us 25 knots of crosswind, which was out of limits for the T-34. We settled for the active. I kept an elbow wedged between the canopy and the windshield until the final approach. Using both hands to work the power and fly, I watched in horror as my canopy slowly shut.


For a few seconds, I actually thought I could make the landing. However, a strong crosswind and no crab or other crosswind corrections made for a steady, right drift. I just couldn't keep it going without any visual cues. Against my deep desire to get the plane on deck, I waved off.

On climbout, Scott took the controls, and I opened my canopy enough to see that we were actually two runway widths right of the runway! We flew a tight pattern for another try, counting the seconds as oil still streamed out of an engine that held only 11 quarts. This time, Scott unlocked his harness and reaching forward across his glareshield, held onto the aft rail of my canopy as I pushed it backward. I could see – sideways, at least.

I flew an oval (instead of box, civilian-style) pattern, keeping the field in view until I was wings-level on final. Holding what I had, and keeping a consistent glideslope, I soon picked up visual cues indicating we were over the runway. I thought equal amounts of concrete on both sides was a good thing, and I kept descending until we touched down.

We were greeted by a fleet of crash trucks and enjoyed a tow to the hangar. A check of the oil produced a completely dry dipstick. We had certainly made our last pass, one way or another.

Our flying club maintenance officer gave me a few words of wisdom during my Mentor checkout, and they really proved true that day. First, "Never fly the Mentor alone." Second, "Always fly the Mentor wearing clothes you don't mind getting dirty." Scott and I were splattered with engine oil, but very happy to be on deck.

I can think of no better example of great aircrew coordination than Scott's help with ideas, holding my canopy open, and flying the airplane. As an S-3B NFO, I usually provide backup to my pilot. This day, it was a pilot who made it possible for an NFO to land. It was a lot of work just for a .5 (which I logged as actual IMC). 

Lt. Gunji flies with VS-24.

# Devil 500



## Meets the Mot

by Cdr. E.M. Storrs

WAS AS GOOD A HOPE as you could hope for without being a Southern Watch mission: a day launch mining-and-SSC mission in the North Arabian Gulf, then a moonlit recovery.

As we turned up for launch, the weather looked a little hazier than normal. The haze must have been caused by dust, since our weather brief had not warned of anything worse than low visibility in haze. A typical Gulf spring day. Besides, it never rains in the Gulf.

After we launched and headed north to our bombing area, we noticed some large buildups and encountered some heavy rain during our mining runs. Nothing an all-weather aircraft and crew couldn't handle, though. After a few SSC identifications, we headed back toward marshal. During our mission, the weather had deteriorated. We had to pick our way through a wall of embedded thunderstorms. We got a lovely light show from the refueling probe, now a lightning rod. We made it through to VFR conditions and breathed a sigh of relief, figuring we had passed through the worst of the weather.

Our mighty carrier, equipped with the latest and greatest radar gadgetry, would surely steer toward a clear area to ease our recovery. Someone must have angered the gods, however, because not only was the ship not headed toward a clear area, it was right in the middle of the mother of all thunderstorms. The XO was kind enough to pull off the radar hood to give me a lesson in interpreting a radar scope. It looked like a scene from the movie, "The Final Countdown."

We decided it was a good idea to fly at max conserve to give us a little cushion if needed. The XO also dialed up both approach frequencies so we could get a feel for the excitement of tonight's festivities. All of the rest of the night events were canceled, and our approach

time was delayed as our pointy-nosed brethren filled up the bolter-waveoff pattern.

As we descended from marshal, we were treated to all the splendors of thunderstorms at night. Night vision was the first casualty of the frequent nearby lightning strikes. Our CV-1 approach was immediately modified to random radar vectors because nobody was having much luck at getting aboard despite the best efforts of our talented paddles.

As we settled down in the 1,200-foot GCA box-pattern with the rest of the air wing, we noticed through the turbulence that we were picking up airspeed rapidly without any change in throttle position from me. As we wondered out loud about how odd this situation was, I remembered a story I had read about microbursts and then watched in amazement as the airspeed indicator rapidly went from 190 KIAS to 130 KIAS and was still decaying! I applied MRT and held the aircraft at the AOA for climbing flight. We watched and waited for our elevator ride to stop. We bottomed out at 400 feet MSL and started climbing.

With a new-found appreciation for microbursts, and with the ship now circling to find a steady headwind, we asked for the bingo field and fuel. It seemed like a good option because nobody had trapped after 15 minutes, and our turn hadn't even come yet. The reply came that we were blue water ops, even though two great divers were within 100 nm. This was starting to turn into a nightmare.

We figured our own bingo fuel and heading and set up for the approach. The ship was steady on final bearing, but the winds were not in line with the program. We encountered severe wind shifts and shear on the approach, and the best I could do was to be really high at the ramp as paddles advised a bolter. We again

# Other of All Thunderstorms

asked for bingo information as we set up for another attempt. Approach came back with their plan.

"Devil 500, we want you to parallel the ship's course until we find steady winds, then we'll try again. Let us know when you reach a fuel state of 3.2."

After we encountered another microburst, our state was 3.2. We set course for a nearby field and penetrated some more intense weather, but our chances for a safe recovery were better.

As the XO tried to raise any controlling agency, I remembered flying into this field in the past and how impressed I was with all the anti-aircraft defenses there. It struck me that they probably would not think an unidentified object arcing down from 30,000 feet from the north would be conducive to national security, so I became increasingly interested in communication capabilities for diverting aircraft.

Finally, with the help of one of our air-wing compatriots, who was UHF- and VHF-capable, we contacted approach control, and they were willing to help us. The approach and landing were uneventful as the weather over the beach was clear. We shut down with 1,500 pounds of fuel and significant airframe damage from the rough weather we had penetrated.

The lessons from this event were many, but what

I will not forget is to always leave myself an out or a divert option, and not to underestimate the power of microbursts. We learned later that the carrier's stripped aircraft had been ripping burner rouders out of the air.

After the debriefings, I was told that the carrier's stripped aircraft had been ripping burner rouders out of the air.



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I will not forget is to always leave myself an out or a divert option, and not to underestimate the power of microbursts. We learned later that afterburner-equipped aircraft had been tapping burner routinely that night.

After five deployments, I had figured that I was immune from my night in the box. I won't be that stupid again.

Col. Steven W. Smith, USAF, is a retired pilot and a member of the National Transportation Safety Board.

**We had to pick our way through a wall of embedded thunderstorms. We got a lovely light show from the refueling probe, now a lightning rod.**

# Brown and Blue

by Lt. James Dugan

**I**n THREE-AND-A-HALF YEARS as an F-14 RIO, I'd read my share of *Approach* articles and MIRS. I had a few close calls, knew people who had punched out, even had a few friends die. I'd never been anything but a distant observer to a Class A mishap. On a beautiful VFR Tuesday on the Oceana TACTS range, that changed.

The squadron had just started the work-ups and was well into some good unit training with an SFARP against the Oceana aggressors. After a cruise that concentrated on the expanding air-to-ground role of the F-14, it was good to get back in the air-to-air saddle.

We were having a great time. The jets were holding up, and the adversary FA-18 pilots were doing their usual impressive job of keeping us honest, helping us improve, evaluating, and critiquing. Even the weather gurus were cooperating as spring blossomed in the Tidewater area. There were no clouds to worry about, except for the ones we shook off during the 0530 briefs. All in all, it was some quality flying and fighting.

Working in section that Tuesday, the F-14 mission was an HVU CAP against an unknown quantity of MiG-29s, hell-bent on knocking our Prowler buddy out of the sky. We were capping 50 miles southeast of Oceana on the north edge

of TACTS, and intel reported that the hordes were moving north from the southeastern corner.

We had a 15-minute vulnerability window for the constructive strike package the Prowler was masking, and despite several attempts by the bogeys to penetrate north, the fighters were holding their own.

After resetting CAP twice and then getting vectored south again for another incoming group, the fighters sent a couple of the thousand-pound AIM-54 wingmen downrange to take care of business, followed soon after by a couple of Fox-1s. We were on our shot timeline, feeling like going on offense, and thinking that there may be someone left to mop up, so we cranked back in and proceeded into the merge.

As lead, my aircraft was on the right with our wingman stacked high and left in spread. The bandits were just left of our nose and high as we came up in a climbing left turn to meet them at 19K. They had been in combat-spread before notching, and although we had only one lock between the section, we at least thought we knew where to look for the other.

Sure enough, at four miles, my pilot called, "Tally one," on the bandit I had locked, and I came out of the cockpit to look for his wingman. The lead bogey (he was locked) was easy to spot as he came to the merge... he was in a descend-

**I know they both saw at least one of us, probably both, but I guess they never saw each other...**

# Hornet Crunch

ing left turn coming toward us, and he was aileron-rolling to indicate that he was already dead. Kill, one blue Hornet.

His wingman was a little tougher, but at two or three miles, I heard the "Tally two" call and quickly saw the second Hornet, which was brown, coming nose-on to us, also off the left side. He was outside his lead and stacked low, coming up and left to meet us with what looked to be about a 45-degree bite. I know they both saw at least one of us, probably both, but I guess they never saw each other, because at one mile I watched the brown Hornet put his nose through the wing of the blue Hornet and keep on coming.

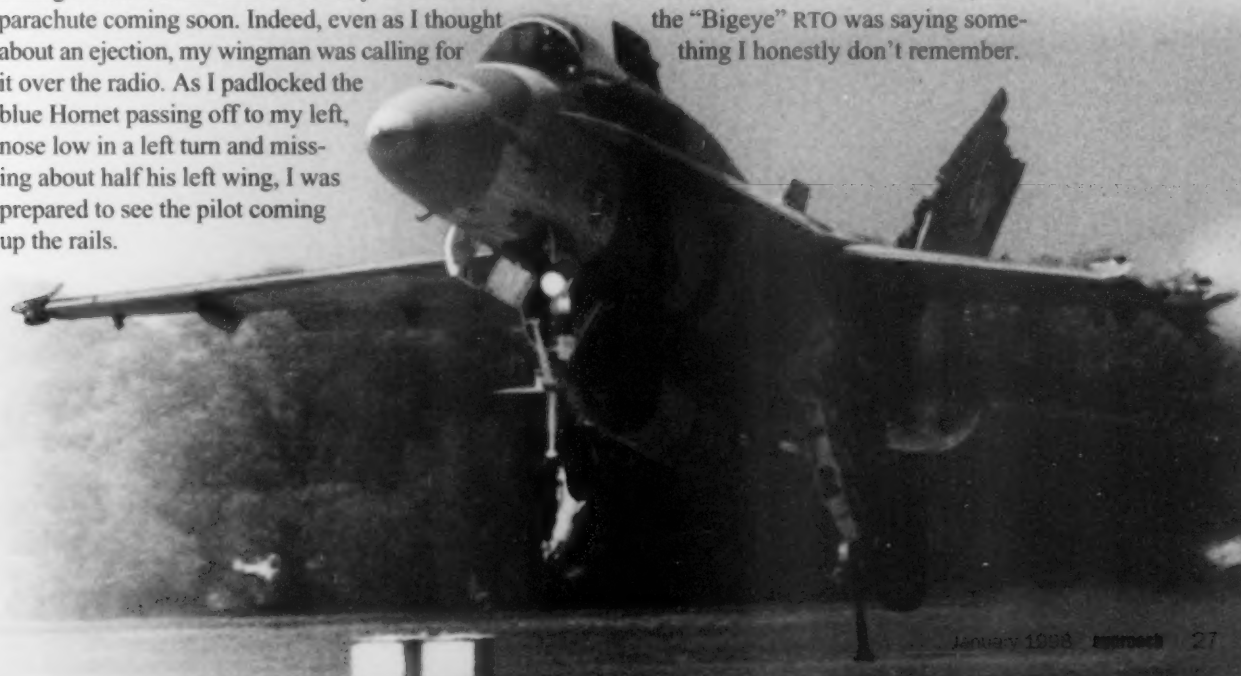
At first I couldn't believe what I was seeing. It looked like the brown Hornet was popping chaff and flares, but in the second-and-a-half before I started yelling, "Midair!" over the radio, I realized that those were in fact aircraft parts falling below me and that there may well be a parachute coming soon. Indeed, even as I thought about an ejection, my wingman was calling for it over the radio. As I padlocked the blue Hornet passing off to my left, nose low in a left turn and missing about half his left wing, I was prepared to see the pilot coming up the rails.

The brown Hornet passed somewhere below us and out of sight, and as we continued around in our left turn, I expected to see that pilot, too, this time out of his jet and floating down. But, as it turned out, neither pilot tried to eject.

It took about a minute and a half and a hell of a lot of radio work to figure out what was going on. My initial thoughts were that the pilot of the blue Hornet was incapacitated or dead and that the jet was just going to continue its gentle left descent into the water as its computers tried to trim out its asymmetries.

I had no idea where the brown Hornet was.

In the meantime, the radios were hot. My pilot was losing sight of the blue Hornet. I had him but was having trouble talking my driver's eyes onto him. My wingman was off-frequency talking to tower and trying to start the SAR effort. The E-2 we were working with wanted to know who was the on-scene commander, and the "Bigeye" RTO was saying something I honestly don't remember.







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There was a lot of confusion, and I still wasn't completely sure if we had two live pilots and two flying Hornets, or someone floating down behind us. I could still see the fuel streaming out of what had to be the blue FA-18 way down in front of me. He appeared to be turning right and pointing toward land, and there was something a little higher than him and maybe just behind him. It was brown, but it sure didn't look like a plane. I initially thought it was some big cargo ship on the surface 7,000 feet below me. It was the other Hornet.

As an F-14 RIO, I have a soft spot for the Grumman Ironworks' products. In our community, we joke that the Hornet can't make it to the store without needing gas, but I earned a new respect for McDonnell-Douglas and their combat-damage teams that Tuesday. Our section wound up joining on the brown Hornet, while another Hornet from the original four joined the blue one. I got a good, close look at the ugliest thing I've ever seen flying. The radome was gone. The radar was gone. The centerline droptank was gone. Wires were flapping out of the nose, beating against the side of the jet and causing big problems for the pilot because the entire canopy aft of the windscreen and bow was also gone.

It's unnatural to see a blunt-nose convertible flying, and I'm sure it's even less natural to fly it, so I take my hat off to the adversary pilot at the stick. He was doing an amazing job keeping his jet flying, and he was doing the smart thing in just simply pointing at the beach and aiming for Oceana, a long 50 miles away.

The entire time back he had an F-14 on either wing, something that worked in his favor. I couldn't find him on the radios. I was up his base frequency, switching between approach, tower and my own base on the other trying to pave his way in, but I just couldn't talk to him. I heard all about the blue Hornet 10 miles ahead of me. He had lost half of his left wing and part of his left vertical stab but was controllable and taking a trap. But I couldn't find the brown Hornet on any frequency. I figured the midair had killed his radios, so I was content to bulldoze our way into tower and get him on deck.

As it turned out, he had never left the control frequency he had been working (he got kind of busy after swapping paint), and was talking to my heads-up wingman, getting airspeed and altitude calls, because his pitot-static system had been left somewhere over the water. He may have been single engine. We saw flames shooting out his tail three times. We heard later that he went into full stall at military power, but somehow it was all working.

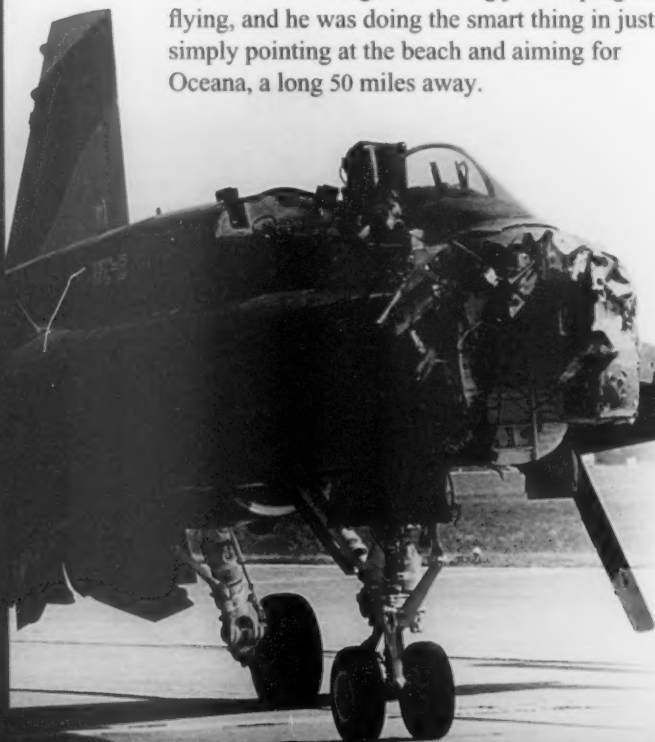
We were 15 miles from the field with the hook down and the gear coming, pointed at the nearest runway. I felt confident that since approach had accommodated us so nicely, tower would do the same. Unfortunately, they had their own problems.

Blue Hornet was 10 miles ahead of us, shooting a straight-in to runway 23 for a trap. We were lined up for runway 32, also taking a trap, and tower was becoming adamant that we had to enter a left base for the 23 parallel.

Looking at flames and the pilot's head in the wind, not knowing if he could stop a sink rate once it got started, I figured that it just didn't matter what they thought. I wasn't talking to the Hornet driver, anyway. It took 10 miles of arguing with the tower, an acknowledgement that the blue Hornet had fouled the cross runway, and ultimately the call, "Tower, he's not talking to you, and he is landing!"

to get the brown Hornet down on 32 right. He never did get clearance to land. But they were both safe, and they both walked away that Tuesday with nothing more than minor cuts and bruises.

Lt. Durand flies with VF-41.









# LESSONS LEARNED

There are two ways to get smart. One is through experience – we call this “the hard way.” The other is to learn through others’ experiences. The second method is much easier on our machines and bodies.

## Seven Seconds to Disaster

by LCdr. Frank Mellott

**T**he CARRIER FLIGHT DECK was ready for an Event 1, Case 1 launch. The Hawkeyes and Vikings would launch 10 minutes early, freeing deck space for the other aircraft to move about. Crews were finishing last-minute checks before launch. Our aircraft and flight-deck crew were waiting to go on the starboard side just-aft of the cat 1 jet-blast deflector on “the point” (between the island and cat 1).

As the early-go E-2 on cat 1 went into tension, an air-wing ordnanceman was making his way to the starboard catwalk from behind the JBD. As he stepped out from behind the deflector, the Hawkeye’s prop-wash knocked him down and sent him skidding toward our turning Prowler, his tools dropping from his tool pouch.

Less than three seconds later, two of our flight-deck crew tackled him. An equally alert line-division supervisor grabbed the loose tools. Everyone struggled to hold onto people and tools until the catapult finally fired and the Hummer went on its way.

The plat tape showed that the entire episode, from the ordie leaving his feet until he was tackled on the deck, took less than seven seconds. Imagine the consequences if our had crews not been so attentive – a major engine FOD, a serious injury, or possibly the death of a shipmate.

Disaster can happen to anyone on the flight deck. Fortunately, our flight-deck crew was alert, well-rested and experienced. The ordie will now be able to share his experience with others and prevent someone else from making the same mistake.

### Lessons Learned:

1. Keep the flight-deck and air crews constantly alert to prop-wash danger.
2. When you’re walking on the flight deck; anticipate how you would react in a similar situation.
3. If you do get in the way of prop-wash or jet exhaust, get down and try to grab a padeye.



J03 Oscar Sosa

LCdr. Mellott flies with VAQ-141.

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